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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,021	07/15/2003	Jin Huai	CIS0031D1US	4195

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EXAMINER	
MOUTAOUAKIL, MOUNIR	
ART UNIT	PAPER NUMBER
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/620,021	HUAI ET AL.	
	Examiner	Art Unit	
	Mounir Moutaouakil	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13-21 and 27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13-21, and 27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *02/28/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

2. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 103

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 13, 14, 16-18 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawafuji et al (US 5,999,536). Hereinafter referred to as Kawafuji.

Regarding claim 13 and 14, the system of Kawafuji discloses a plurality of interfaces (see figure 2, boxes 21a-21c) within the same circuit (see figure 2).

Kawafuji does not disclose a method or a way of assigning an identifier to each one of the multiple interfaces within the circuit. However, the background of the invention discloses that it is well known to a person of ordinary skill in the art at the time of the invention was made to automatically assign different addresses or identifiers or numbers to each one of the interfaces embedded within the circuit and transmit those addresses assigned to each one of the interfaces units (see column 1, lines 48-52, the system does assign IP addresses to the interfaces embedded within. Moreover, the addresses of each interface are registered in each interface unit, which indicate that the addresses have been transmitted, see figure 2, multiple interfaces are embedded within the circuit). The motivation for assigning and transmitting the interface indicators being that it will facilitate communication between network components and update link information between components.

Regarding claim 16, Kawafuji system further discloses storing the number assigned in a first table in a network element including the circuit switch and wherein at least another network element in the network stores the number in a second table (see column 5, lines 24-65. each element 20 and 20' has a memory table capable of storing the addresses or indicators of each interface and each terminal within the network).

Regarding claim 17, Kawafuji discloses a first circuit switch with a first interface (see figure 2, box 21a or 21b or 21c), a second circuit switch with a second interface, (see figure 1, routers 20 and 20', therefore box 20', figure 2, interfaces 21a or 21b or 21c). Kawafuji also discloses a memory table within each of the circuits 20 and 20'; both memory tables include the first identifier and second identifier assigned to the first and second interfaces (see column 5, lines 24-60, where the memory table stores the identifiers of every element including the interfaces). Kawafuji also discloses that the first and second interfaces are couples using a link (see figure 1, boxes 20, 20', and 2).

Kawafuji does not disclose a method or a way of assigning an identifier to each one of the multiple interfaces within the circuit. However, the background of the invention discloses that it is well known to a person of ordinary skill in the art at the time of the invention was made to automatically assign different addresses or numbers to each one of the interfaces embedded within the circuit and transmit those addresses (see column 1, lines 48-52, the system does assign IP addresses to the interfaces embedded within. Moreover, the addresses of each interface are registered in each interface unit, which indicate that the addresses have been transmitted). The motivation for assigning and transmitting the interface indicators is being that it will facilitate

communication between network components and update link information between components.

Regarding claim 18, Kawafuji discloses all the limitations of claim 17 with the exception of including fiber optic cables within the link. An official notice is taken that it would have been obvious to a person of ordinary skill in the art at the time of the invention to use fiber optic cables within the link. Using fiber optic cables within the link will allow higher carrying capacity, less signal degradation, and mainly reduce the cost of the system.

7. Claims 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawafuji as applied to claim 13 above, and further in view of Gruber et al (EP 0924952). Hereinafter referred to as Gruber.

Regarding 15 and 19, Kawafuji discloses all the limitations of claim 13. Kawafuji does not disclose the capability of conforming to a protocol selected from a group consisting of SONET/SDH network. However, Gruber discloses the possibility to carry IP over SONET/SDH. Since Kawafuji 's system is using IP network, it would have been obvious to a person of ordinary skill in the art at the time of the invention to use an IP over SONET/SDH because it would enhance the network efficiency, improve the quality of service, and increase the data transmission rate.

8. Claim 20 is rejected under 35 U.S.C 103 (a) as being unpatentable over Kawafuji as applied to claim 17 above, and further in view of Ciscon et al (US 5,812,779). Hereinafter referred to as Ciscon.

Kawafuji discloses all the limitation of claim 17 with exception of including an entry indicating function of link between circuits. However, Ciscon discloses a routing system, where routers are capable of updating each other's tables and connection status or link status (see column 21 line 65-column 22 line 3, the routers communicate with each other to update the link function). Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to implement the method of checking link function as taught by Ciscon into system of Kawafuji. The motivation for using the link function as taught by Ciscon into the system of Kawafuji being that it will avoid transmission delays and system malfunction.

9. Claim 21 is rejected under 35 U.S.C 103 (a) as being unpatentable over Kawafuji as applied to claim 17 above, and further in view of Zadikian et al (US 6,631,134). Hereinafter, referred to as Zadikian.

Kawafuji discloses all the limitation of claim 17 with exception of including an entry indicating a predetermined number of contiguous frames that may be transmitted over the link. However, Zadikian discloses a method of allocating bandwidth between first and second node (see abstract, the system teaches how to allocated the available bandwidth between node 1 and 2. Bandwidth is a scale of how many frames can be carried through the link). Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to implement the method of allocating bandwidth or the number of frames the may be transmitted trough the link as taught by Zadikian into the system of Kawafuji. The motivation for using the method of allocating bandwidth or the number of frames the may be transmitted trough the link as taught by Zadikian into

the system of Kawafuji being that it will be able to allocate and determine the maximum number of frames that may be transmitted through the link.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mounir Moutaouakil whose telephone number is 571-270-1416. The examiner can normally be reached on Monday-Thursday (4pm-4: 30pm) eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mounir Moutaouakil
Art Unit: 2616

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